

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
DALLAS, TEXAS

RECEIVED
EPA REGION 1
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IN THE MATTER OF:

MURMUR CORPORATION and
MURMUR LEASING CORP.

RESPONDENT

REGARDING THE

WEST DALLAS LEAD (RSR) SITE
DALLAS, DALLAS COUNTY, TEXAS

Proceeding under § 104, § 106(a) and
§ 122 of the Comprehensive
Environmental Response, Compensation,
and Liability Act of 1980,
42 U.S.C. §§ 9604, 9606(a) and
9622, as Amended by The Superfund
Amendments and Reauthorization Act
of 1986, P.L. 99-499

ADMINISTRATIVE ORDER
ON CONSENT
DOCKET NUMBER
CERCLA
6-05-92

ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION

I. JURISDICTION

1. This ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION ("ORDER") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Respondent pursuant to Sections 104, 106, and 122 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. §§ 9604, 9606, and 9622, as amended, by authority delegated by the President of the United States to the Administrator of the U.S. EPA on January 29, 1987, by Executive Order 12580, 52 Fed. Reg. 2923, and redelegated to the Regional Administrators on February 26, 1987, by EPA delegation number 14-14-C, and further redelegated to the Director, Hazardous Waste Management Division, EPA Region 6.
2. Respondent hereby agrees to undertake all actions required by the terms and conditions of this ORDER. In any action by EPA

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or the United States to enforce the terms of this ORDER, Respondent consents to and agrees not to contest the authority or jurisdiction of EPA to issue or enforce this ORDER, and agrees not to contest the validity of this ORDER or its terms. Except for the jurisdiction and authority provisions set forth in the previous sentence, Respondent neither admits nor denies any fact, determination, finding of fact or conclusion of law whether expressed or implied contained in this ORDER.

II. DEFINITIONS

3. Unless otherwise expressly provided herein, terms used in this ORDER which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in the statute or its implementing regulations. Whenever terms listed below are used in this ORDER or in the documents attached to this ORDER or incorporated by reference into this ORDER or in schedules and deadlines established and approved pursuant to this ORDER, the following definitions shall apply:
 - A. "Action Memorandum" shall mean the EPA Final Action Memorandum relating to the site, signed on October __, 1991 by the Regional Administrator, EPA Region 6, and all attachments thereto. (See Attachment A.)
 - B. "ARARs" shall mean all applicable local, state, and Federal laws and regulations, and all "applicable requirements" or "relevant and appropriate requirements" as those terms are defined at 40 CFR § 300.5 and 42 U.S.C. § 9621(d).
 - C. "Area of Contamination" shall mean the area defined as the West Dallas Lead (RSR) Site.
 - D. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601 et seq.
 - E. "Day" shall mean calendar day unless expressly stated to be a business day. "Business day" shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this ORDER, where the last day would fall on a Saturday, Sunday, or Federal holiday, the period shall run until the end of the next business day.
 - F. "EPA" shall mean the United States Environmental Protection Agency.
 - G. "Murmur" shall mean Murmur Corporation and/or Murmur Leasing Corp.

- H. The "Murmur Property" consists of three separate tracts, of which Tract 1 is the old RSR smelter, Tract 2 is the present location of the current operations of Murmur, and Tract 3 is the old battery breaking area previously operated by RSR and is presently under a closure order by TWC. Tract 1 and Tract 2 and 3 are separated by Westmoreland Road with Tract 1 on the southeast corner of Singleton Boulevard and Westmoreland Road and with Tract 2 and 3 on the southwest corner of Singleton Boulevard and Westmoreland Road.
- I. "National Contingency Plan" or "NCP" shall mean the National Contingency Plan promulgated pursuant to § 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, including any amendments thereto.
- J. "ORDER" shall mean this document and all attachments hereto and any further submittal(s) required pursuant to this ORDER. Such further submittal(s) shall be incorporated into and become a part of this ORDER upon final written approval by EPA of such submittal(s).
- K. "Paragraph" shall mean a portion of this ORDER identified by an arabic numeral.
- L. "Performance Standards" shall mean those cleanup standards, standards of control, and other substantive requirements, criteria, or limitations, identified in and/or required by the Action Memorandum or this ORDER and its attachments, including the Statement of Work.
- M. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901 et seq.
- N. "Removal action" shall mean those activities to be undertaken pursuant to this ORDER.
- O. "Respondent" shall mean Murmur Corporation and/or Murmur Leasing Corp.
- P. "Response Costs" shall mean all costs, including but not limited to past costs, direct costs, indirect costs, and accrued interest incurred by the United States and the State at the direction of EPA to perform or support response actions at the site, enforcement costs, legal costs, laboratory and analytical costs, and costs such as the costs of reviewing or developing plans, reports, and other items pursuant to this ORDER and costs associated with verifying the Work to be performed under the terms of this ORDER.
- Q. "Section" shall mean a portion of this ORDER identified by a roman numeral and including one or more paragraphs.

- R. "Site" shall mean the West Dallas Lead (RSR) Site, which is generally described with the north and east boundaries as the Trinity River, the south boundary as Fort Worth Ave. and the west boundary as Loop 12 (Walton Walker).
- S. "State" shall mean the State of Texas.
- T. "Tract 1" shall mean those areas which are more fully described in Paragraph 9 of this ORDER.
- U. "TWC" shall mean the Texas Water Commission.
- V. "United States" shall mean the United States of America.
- W. "Work" shall mean all activities Respondent is required to perform under or pursuant to this ORDER and any attachments or incorporations hereto.

III. NOTICE OF ACTION

- 4. The EPA has notified this potentially responsible party, i.e., the Respondent, Murmur, whom it has identified as of the date of the entry of this ORDER of this action. No other PRP has been identified as of the date of this ORDER.
- 5. Notice of the issuance of this ORDER has been given to the State of Texas through the Texas Water Commission (TWC).

IV. PARTIES BOUND

- 6. This ORDER shall apply to and be binding upon the Respondent, its employees, agents, directors, officers, contractors, receivers, trustees, successors, or assigns. No change in the ownership, corporate status, or other control of the Respondent shall alter any of the Respondent's responsibilities under this ORDER.
- 7. The Respondent shall provide a copy of this ORDER to any subsequent owners or successors before property rights, stock, or assets are transferred.

V. STATEMENT OF PURPOSE

- 8. The purpose of this ORDER is to protect the public health or welfare or the environment from releases or threatened releases of any "hazardous substance" or "pollutant or contaminant" as those terms are defined in §§ 101(14) and (33), respectively, of CERCLA, 42 U.S.C. §§ 9601(14) and (33), by addressing the threat to human health and the environment posed by hazardous substances, pollutants and/or contaminants located at the facility known as the West Dallas Lead (RSR) Site (herein referred to as the "site" or "facility"). EPA

plans to address the threat by consolidation of hazardous substances from areas of contamination with the West Dallas Lead (RSR) Site onto Tract 1 which is owned by Murmur and is located within the site. Murmur will provide access for storage of equipment and contaminated soils and debris and maintain security at Tract 1 as discussed in the "Work To Be Performed Section."

VI. FINDINGS OF FACT

9. The West Dallas Lead (RSR) Site is generally described with the north and east boundaries as the Trinity River, the south boundary as Fort Worth Ave. and the west boundary as Loop 12 (Walton Walker).

Within the boundaries of the site, as described, the predominant land use is residential, both single and multi-family units. There is a moderate amount of light industry and little to no heavy industry. As the predominant land use of the area is residential, several schools, churches, parks, recreation facilities, day care centers, shopping areas and other related service oriented businesses are located within the site boundaries. Population within the area numbers in the several thousand, with the demographics reflecting predominantly low income minorities.

Tract 1 is located in Dallas, Dallas County, Texas, West of Interstate Highway 35E and North of Interstate Highway 30 at the northeast corner of the intersection of Westmoreland Road and Singleton Boulevard. The site is reached by exiting from Interstate Highway 35E at the Mockingbird Lane exit and proceeding west. Mockingbird Lane changes into Westmoreland Road, and the site is at the intersection with Singleton Boulevard, a distance of approximately five miles. From Interstate Highway 30, exit at Westmoreland Road and proceed north for approximately 1.5 miles to the intersection with Singleton Boulevard.

The legal description of the Tract 1 property is as follows:

BEING a tract of land situated in the John C. Reed Survey, Abstract No. 1186, part of City Block 7224, City of Dallas, Dallas County, Texas, and being more particularly described as follows:

BEGINNING at the intersection of the East line of Westmoreland Road, (a 100 foot R.O.W.), with the South line of Singleton Boulevard, (a 100 foot R.O.W.), an "X" found in concrete for corner;

THENCE, South 88 deg. 56 min. East, with the said South line of Singleton Boulevard, a distance of 448.43 feet, to the beginning of a curve to the left having a

central angle 02 deg. 23 min. 10 sec., a radius of 6226.62 feet, an iron stake for corner;

THENCE, Easterly with the said South line of Singleton Boulevard, same being with said curve to the left, an arc distance of 259.31 feet, to the intersection with the West line of Westerfield Street, an iron stake found for corner;

THENCE, South 01 deg. 02 min. West, with the said West line of Westerfield Street, a distance of 200.6 feet, an iron stake for corner;

THENCE, North 89 deg. 19 min. West, a distance of 150.07 feet, an iron stake for corner;

THENCE, South 01 deg. 02 min. West, with the West line of a tract of land conveyed to Dallas Power and Light Company, same being with a fence line, a distance of 273.16 feet to a point in the North line of Texas and Pacific Railroad's 150 foot R.O.W., an iron stake for corner;

THENCE, Westerly with the Northerly line of said Texas and Pacific Railroad, same being with a curve to the left, having a central angle of 05 deg. 25 min. 26 sec., a radius of 5804.65 feet, tangent bearing North 85 deg. 29 min. 08 sec. West, an arc distance of 549.50 feet to the intersection with the said East line of Westmoreland Road, an iron stake for corner;

THENCE, North with the said East line of Westmoreland Road, a distance of 462.39 feet to the PLACE OF BEGINNING and CONTAINING 285,250 square feet of land or 6.5484 acres of land.

The aforementioned property description is from that survey of August 1, 1984, prepared in conjunction with the transaction described in GF #84/1176-JB of Plano Title Company.

The area immediately surrounding the Tract 1 is primarily commercial and light industrial, with some residential property within 1/4 mile. The nearest human habitation is located approximately 1/4 mile away in a northwesterly and in a northerly direction, with an immediate population of approximately 150. Tract 1 is immediately to the west of an elementary school, with a public utility transmission line easement separating the boundaries of the site and school property. The Tract 1 property line is approximately 1/8 mile from the school structures, with an approximate 1/4 mile distance separating structures on the site and school properties.

10. In July 1991, the United States Environmental Protection Agency (EPA) was notified by the Texas Water Commission (TWC) that hazardous waste and/or materials had been found in the West Dallas area. The TWC discovered this material/waste

after investigating a citizen's complaint. The materials discovered by the TWC were slag and battery chips allegedly originating from the "RSR Corporation" smelting facility and were either disposed of improperly or used as "fill" material. Analytical results on this material indicated lead levels at 64,000 ppm, arsenic levels in excess of 2000 ppm and cadmium levels above 100 ppm. After the initial discovery of the slag and battery chip material in non-residential areas, several additional citizen's complaints regarding similar contamination on residential property were received by the TWC. Analytical results from these areas were similar in concentration to the non-residential areas.

The principal contaminants of concern result from the battery recycling process and include arsenic, cadmium and lead, which are listed as hazardous substances as defined by section 101(14) of CERCLA, as amended 42 U.S.C. § 9601(14) and 40 C.F.R. Section 302.4. The most significant contamination has been associated with lead. Recent samples taken from the site show TCLP (Toxicity Characteristic Leaching Procedure) lead concentrations above the established TCLP levels of 5 ppm, so that the samples exhibit the characteristic of toxicity and are RCRA hazardous wastes, and meet the criteria for a hazardous substances under Section 101(14) of CERCLA.

11. Previous enforcement actions at the site have included EPA, several State Agencies, and the City of Dallas. The City of Dallas began a series of legal actions against the RSR Corporation, the previous owner of Tract 1, in 1968, which included fines, lawsuits, and compliance agreements, for air emission standards violations by the smelting operation on Tract 1. Based upon analytical results from the monitoring of air quality around the smelter beginning in 1968, a lawsuit was brought by the City of Dallas and the Texas Air Control Board against the RSR Corporation. An agreed settlement resulted in a 95th State Judicial District Court order, Case No. 83-5680-D, directing the RSR Corporation to install pollution abatement equipment to the smelter smoke stack and to fund a cleanup of the residential areas immediately surrounding the smelter which exceeded the 1000 ppm acceptable exposure level for lead at that time. The cleanup was conducted under the oversight of a Special Master appointed by the Court, and was completed in 1985.

A Federal Trade Commission divestiture order directed at the RSR Corporation in 1983, resulted in the acquisition of Tract 1 by the Murmur (Respondent). In August of 1983, the Texas Water Commission commenced investigations on Tract 1, the smelter location, and Tract III, the battery breaking location. On September 30, 1987, TWC issued a Commission Order directing the closure of Tract III (referred to as Site III in the Order) due to the loss of interim status and the lack of a valid permit. TWC records indicate that Tract 1,

the smelter, was abandoned prior to an August 7, 1984, industrial solid waste compliance inspection and has not operated since the inspection. Although no waste was being generated at that time, the inspection revealed a variety of waste remained at the Tract 1 location. These waste included smelter baghouse dust, spent diatomaceous earth, lead oxide dust, spent refractory brick, waste oil, spent absorbent, grease, kerosene, filter bags (in plastic bags), empty drums, contaminated rainwater and miscellaneous scrap materials. [Reference August 3, 1989, CEI Inspection Report, TWC] On October 22, 1991, EPA observed similar conditions in the area referred to as the "Batch House" in that materials which appeared to be lead oxide dust, diatomaceous earth, and baghouse dust were present in the area. Observation in the furnace portions of the smelter appeared to support the existence of waste similar to that described in the TWC report with the exception of the rainwater, waste oil, grease, and kerosene.

Sample analysis from the August 3, 1989, TWC inspection in the "Batch House" area showed lead concentrations in a dust sample from Bin #9 to be 117,000 mg/kg (117,000 ppm) and a solids sample (diatomaceous earth) from Bin #9 with lead concentrations of 49,800 mg/kg (49,800 ppm).

12. The following summary lists the contaminants of concern. The samples were taken by TWC inspectors on June 30, 1989, at the Tract 1 smelter location. Attachment C is a copy of the August 3, 1989 report.

<u>Total Metals</u>	<u>Value</u>
Location in front of Bin #9	
Lead	117,000 mg/kg
Cadmium	2080 mg/kg
Arsenic	5304 mg/kg
Location in Bin #9	
Lead	49,800 mg/kg
Cadmium	133 mg/kg
Arsenic	477.5 mg/kg

13. Field observations during the EPA visit of October 22, 1991, noted that the drop curtains on the personnel and materials entrances to the "Batch House" were in a deteriorating condition, and that some areas of siding on the wall structure allowed the passage of cross ventilated air flow. Additionally, the materials observed in the "Batch House" appear similar to those described in the TWC report of August 3, 1989, both by the location (near and in Bin #9) and physical description. No curbing to channel or control surface flow of water or liquids was noted, either in the

structure itself, or surrounding the structure. These conditions pose a threat of exposure to hazardous substances through air migration or other exposure routes.

14. On October 21, 1991, EPA Civil Investigators obtained title documents which show the current owner of Tract 1 to be Murmur.
15. The Respondent, Murmur, is a Texas corporation which manufactures and fabricates finished products such as lead sheets, plates, pipe, sleeving, and lead shot on Tract 2 of their facility.
16. The soils contaminated with smoke stack emissions and/or battery chips will be removed by EPA from the residential and highly frequented public access areas and consolidated and stored at the source, the old RSR Smelter location, now known as Tract 1. At the secure storage area on Tract 1, soil and debris will be stored pending ultimate remediation.

VII. CONCLUSIONS OF LAW

17. The site is a "facility" as defined in § 101(9) of CERCLA, 42 U.S.C. § 9601(9), because it is a site or area where hazardous substances have been deposited, stored, disposed of, placed or otherwise came to be located.
18. Each substance identified in the Findings of Fact above is a "hazardous substance" as defined by § 101(14) of CERCLA, 42 U.S.C. § 9601(14).
19. Based on the findings in paragraph 15, the Respondent is a "person" as that term is defined in § 101(21) of CERCLA, 42 U.S.C. § 9601(21).
20. CERCLA defines the term "hazardous substance" as "(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C.A. § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C.A. § 6901 et seq.] has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 U.S.C.A. § 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 2606 of Title 15." The substances found at the site and identified in paragraph 11 above are "hazardous substances" as defined in § 101(14) of CERCLA, 42 U.S.C. § 9601(14), and are subject to the terms and

provisions of that act.

21. CERCLA defines the term "pollutant or contaminant" to include, but not be limited to, "any element, substance, compound, or mixture, including disease causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring; except that the term 'pollutant or contaminant' shall not include petroleum, including crude oil of any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of paragraph (14) and shall not include natural gas, liquified natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas)." [CERCLA § 101(33); 42 U.S.C. § 9601(33)]
22. The "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment" of hazardous substances, constitutes a "release" as defined in § 101(22) of CERCLA, 42 U.S.C. § 9601(22). The threat of occurrence of any of the above constitutes the threat of a release of hazardous substance.
23. The past releases of uncontrolled smoke stack emissions as a result of lead smelter operations on Tract 1 caused the aerial dispersion (a.k.a. downwash or fumigation) of stack emissions at the site of hazardous substances into the "environment" which constitutes a "release" as defined in §§ 101(8) and (22) of CERCLA, 42 U.S.C. §§ 9601(8) and (22).
24. The conditions present at the Site constitute a threat to public health or welfare or the environment based upon the factors set forth in section 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan, as amended, 40 CFR Part 300, (NCP). These factors include, but are not limited to, the following: actual or potential exposure to hazardous substances by human populations, animals, or the food chain from hazardous substances or pollutants or contaminants present at the Site due to the existence of contaminated soils largely at or near the surface, that may migrate.
25. The actual or threatened release of hazardous substances from the Site may present an imminent and substantial endangerment to the public health, welfare, or the environment pursuant to section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

26. The removal actions of consolidation of the contaminated soils and debris are necessary to protect the public health, welfare and the environment and will reduce the spread of and direct contact with the contamination. The removal actions required by this Order, if promptly and properly performed, will be consistent with the NCP and CERCLA.
27. Respondent is the present "owner" or "operator" of the Site, as defined by section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of section 107(a)(1) of CERCLA.
28. The Respondent is a responsible party as defined in § 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is subject to this ORDER under § 106(a) of CERCLA, 42 U.S.C. § 9606(a).
29. As a responsible party under § 107(a) of CERCLA, 42 U.S.C. § 9607(a), Respondent is liable for all costs incurred by EPA not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan ("NCP"), 40 C.F.R. Part 300.

VIII. DETERMINATION

30. Based on the above findings of Fact and conclusions of law, the following determinations are made:
 - A. To the extent practicable, the response action which EPA is performing and the activity of the Respondent required in this Order further contributes to the efficient performance of any long term remedial action with respect to the release or threatened release concerned, as required by § 104(a)(2) of CERCLA, 42 U.S.C. § 9604(a)(2).
 - B. The site or facility may present an imminent and substantial endangerment to the public health or welfare or the environment because of an actual or threatened release of hazardous substances from this facility.
 - C. The actions required by this ORDER are necessary to protect the public health or welfare or the environment, are in the public interest, and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(c). The actions required by this ORDER are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a).

IX. ORDER

31. Based on the foregoing findings of fact, conclusions of law and determinations, and in order to protect the public health and welfare and the environment and to address the threat of

exposure from direct contact and other exposure routes with those hazardous substances which exist at the site, Respondent is hereby ORDERED and consents and agrees to comply with all terms and conditions in this ORDER.

X. WORK TO BE PERFORMED

32. Respondent agrees to allow EPA and its employees and officers access to Tract 1 at all times.
33. Respondent agrees to make available the Batch House on Tract 1 (See Attachment D, survey) and other areas that EPA deems appropriate and necessary for the consolidation and storage of contaminated soils and other related debris.
34. Respondent agrees to allow the storage of equipment, which is used to consolidate the area of contamination, and the storage and staging of contaminated soils and debris which result from the consolidation of the area of contamination.
35. Respondent agrees to assist in maintaining security for Tract 1 when personnel from EPA are not present at Tract 1 and grant access only to authorized personnel and representatives from EPA, the State and Murmur. Respondent also agrees to observe all posted warnings of EPA and secured areas designated by EPA.

XI. FUTURE RESPONSE ACTIVITY

36. Not later than 18 months from the effective date of this ORDER, EPA will contact Murmur and notify Murmur of its estimate of whether:
 - a. the site will be listed on the National Priorities List (NPL) pursuant to CERCLA, 42 U.S.C. § 9601 et seq. or is still at the Office of Management and Budget (OMB) for review prior to being listed on the NPL, or
 - b. the site will not be listed on the NPL.
37. If it is determined that the site will not be listed on the NPL, then the TWC will be notified and EPA will initiate ultimate disposition of the materials stored by EPA at the site.
38. If it is determined that the site will be listed on the NPL, then EPA will follow the NCP, CERCLA and other applicable and relevant regulations and guidances, policies, and procedures, and take the appropriate steps pursuant to those laws and guidelines.
39. If the ranking package is still at OMB later than 18 months

after the effective date of this ORDER, EPA, Region 6, will request a status report from EPA Headquarters (EPA HQ) regarding the status of the ranking package. EPA, Region 6, will notify Murmur of its request to EPA HQ regarding the status of the ranking. EPA will meet with Murmur as soon as it is determined whether the site will be listed on the NPL. If the site is listed on the NPL, then Paragraph 38 of this section will apply. If the site is not listed on the NPL, then Paragraph 37 of this section will apply.

XII. ENDANGERMENT AND EMERGENCY RESPONSE

40. In the event of any action or occurrence during the performance of the Work which causes or threatens to cause a release of a hazardous substance or which may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action to prevent, abate, or minimize the threat, and shall immediately notify EPA's On-Scene Coordinator (OSC) or, if the OSC is unavailable, EPA's Emergency Response Unit, Region 6. Respondent shall take such action in consultation with EPA's OSC [or his/her designee] and in accordance with all applicable provisions of this ORDER, including but not limited to the Health and Safety Plan.
41. Nothing in the preceding paragraph shall be deemed to limit any authority of the United States to take, direct, or order all appropriate action to protect human health and the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances on, at, or from the site.

XIII. COMPLIANCE WITH APPLICABLE LAWS

42. The work to be performed under this ORDER shall be consistent with the NCP. All activities by Respondent pursuant to this ORDER shall be performed in accordance with the requirements of all applicable Federal and state laws and regulations, as well as in compliance with all applicable EPA guidances, policies, and procedures.
43. EPA retains its rights and power to take any and all action, including but not limited to any Enforcement Action, to address noncompliance by Respondent with the terms and conditions of this ORDER, or to address any other event or occurrence covered by this ORDER upon which EPA is empowered to act under any applicable law.
44. This ORDER is not, and shall not be construed to be, a permit issued pursuant to any Federal or state statute or regulation. Except as provided in § 121(e) of CERCLA and the NCP, no permit shall be required for any portion of the Work conducted entirely on-site.

45. All hazardous substances, pollutants and contaminants removed off-site will be handled and transported in accordance with applicable provisions of RCRA; the applicable regulations promulgated under that Act; applicable Department of Transportation regulations; EPA's Off-Site Disposal Policy, § 121 (d)(3), of CERCLA, 42 U.S.C. § 9621(d)(3), as implemented by OSWER Directive 9834.11 (Nov. 13, 1987); and with all other applicable Federal, state, and local requirements.

XIV. NOTICE

46. All communications, whether written or oral, between Respondent and EPA should be directed to the individuals at the addresses specified below, unless those individuals or their successors give notice in writing to all other parties to this ORDER of another designated individual to receive such communications. Any document will be considered timely if telefaxed to the other parties on the due date as long as the original is mailed to all other parties on the due date.

EPA: U.S. Environmental Protection Agency
Emergency Response Branch (6E-ES)
Attn: Mr. Warren Zehner
On-Scene Coordinator
1445 Ross Avenue
Dallas, TX 75202-2733
214-655-2275
Fax No. 214-655-7446

One Copy To: Mr. John Burleson
U.S. Environmental Protection Agency
Region 6
Superfund Enforcement Branch (6H-EC)
1445 Ross Avenue
Dallas, TX 75202-2733
214-655-6670
Fax No. 214-655-6790

One Copy To: Ms. Kristine A.M. Leopold
U.S. Environmental Protection Agency
Region 6
Office of Regional Counsel (6C-WT)
1445 Ross Avenue
Dallas, Texas 75202-2733
(214) 655-2120
Fax No. (214) 655-2182

One Copy To: Murmur Corporation
Mr. Homer J. Kirby, President
P.O. Box 224566
Dallas, Texas 75222-4566

(214) 630-5400
Fax No. (214) 634-1652

One Copy To: Mr. Paul Gosselink
Lloyd, Gosselink, Fowler, Blevins, and
Mathews, P.C.
Suite 1800
111 Congress Ave.
Austin, Texas 78701
(512) 322-5806
Fax No. (512) 472-0532

XV. FACILITY COORDINATOR AND PROJECT OFFICER DESIGNATIONS

47. Respondent shall appoint a Facility Coordinator who shall be responsible for oversight and implementation of this ORDER and activities required herein. EPA has appointed a Project Officer (or OSC) who will be EPA's designated representative at the facility. The OSC shall have authority of a "Remedial Project Manager" (RPM) and/or "On-Scene Coordinator" (OSC) as specified in the NCP, which includes the authority consistent with the NCP to take or order any necessary response actions. For the purpose of this ORDER the designations "OSC" and "Project Officer" are synonymous.
48. The Respondent or the EPA may appoint a new Facility Coordinator or Project Officer, respectively, at any time. Such changes shall be accomplished by notifying the other party, in writing, at least five (5) days prior to the change. The notice shall consist of the name, telephone number, and mailing address of said new Facility Coordinator or Project Officer, and, for a new Facility Coordinator, his/her qualifications.
49. Routine communications may be exchanged orally between the parties to facilitate the orderly conduct of work contemplated by this ORDER, but no such communication shall alter or waive any rights and/or obligations of the parties under this ORDER. Unless otherwise provided in this ORDER, the terms of this ORDER may only be altered by mutual written consent of the parties or their successors in office.

XVI. OTHER CLAIMS

50. Nothing herein shall be construed as a release from, discharge, or in any way affect any claims, causes of action or demands in law or equity against any person, firm, partnership, or corporation, for any liability it may have to the United States, the State of Texas or any other person, firm, partnership, corporation or association arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous wastes, solid wastes,

pollutants, or contaminants found at, taken to, or taken from the site. The parties to this ORDER expressly reserve all rights, claims, demands, and causes of action they have against any and all other persons and entities who are not parties to this ORDER, and as to each other for matters not covered herein.

51. This ORDER does not constitute any decision on preauthorization of funds under § 111(a)(2) of CERCLA, 42 U.S.C. § 9611(a)(2). In entering into this ORDER, Respondent waives any right to reimbursement for costs under section 106(b) of CERCLA, 42 U.S.C. § 9606(b). Respondent also waives any right to present a claim for costs under section 111 or 112 of CERCLA, 42 U.S.C. §§ 9611, 9612.
52. Nothing herein is intended to be an assumption by the EPA or the United States Government of liability for any injuries or damages to persons or property resulting from acts or omissions of the Respondent, its officers, directors, employees, agents, receivers, trustees, successors, assigns or contractors in carrying out activities pursuant to this ORDER, nor shall the EPA or the United States Government be held out as a party to any contract entered into by the Respondent in carrying out activities pursuant to this ORDER.

XVII. RESERVATION OF RIGHTS

53. Willful violation of, failure or refusal to comply with this ORDER, or any portion of it, may subject Respondent under § 106(b) of CERCLA, 42 U.S.C. § 9606(b), to a civil penalty of not more than TWENTY-FIVE THOUSAND DOLLARS (\$25,000) for each day in which such violation occurs or such failure to comply continues. Failure to comply with this ORDER, or any portion thereof, without sufficient cause, may subject Respondent, under § 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), to liability for punitive damages in an amount up to three times the costs incurred by the government as a result of the Respondent's failure to take proper action.
54. Except as expressly provided in this ORDER, each party reserves all rights and defenses it may have pursuant to any available legal authority. Nothing contained in this ORDER shall be construed as limiting any rights or authority that EPA may now, or hereafter have, under CERCLA, RCRA, or any other law, statute or regulation. EPA specifically reserves the right to take appropriate removal, remedial, cost recovery and/or enforcement action in connection with the site pursuant to any law, statute or regulation, including, but not limited to, the right to seek and obtain injunctive relief, statutory penalties and/or punitive damages.
55. Nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions

necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further nothing in this ORDER shall preclude EPA from taking any additional enforcement actions, including modification of this ORDER or issuance of additional Orders, and/or additional remedial or removal actions as EPA may deem necessary pursuant to CERCLA, 42 U.S.C. § 9606(a) et seq., or any other applicable law.

56. The entry of this ORDER shall not be construed to be an acknowledgement by the Respondent that the release or threatened release concerned constitutes an imminent and substantial endangerment to the public health or welfare or the environment. Except as otherwise provided in the Federal Rules of Evidence, this ORDER or the participation by the Respondent shall not be considered an admission of liability for any purpose in any proceeding other than a proceeding to enforce the terms of this ORDER. Further, Respondent does not admit, and specifically denies, responsibility for the disposal of materials at the site. Respondent specifically denies the findings, conclusions, and determination in this ORDER and expressly reserves the right to challenge them and any legal consequences that may result from them other than in an enforcement proceeding pursuant to this ORDER.
57. Other than waiving its rights to contest EPA's authority or jurisdiction for purposes of enforcing this ORDER, Respondent reserves all rights and defenses that it may have under law. Except as expressly provided in this ORDER, Respondent reserves all rights and defenses that it may have to oppose and defend against any claims and actions concerning the site. In entering into this ORDER, Respondent does not waive its right to assert that other persons not a party to this ORDER are responsible for any liabilities associated with the Site or this ORDER, to seek indemnity or contribution from such persons, or to assert any claim or to impose any other defense which it may have available to it under law. Respondent retains its rights to assert claims against other potentially responsible parties at the site. However, the Respondent agrees not to contest the validity or terms of this ORDER, or the procedures underlying or relating to it in any action brought by the United States, including EPA, to enforce its terms.
58. Nothing in this ORDER affects the Respondent's rights to seek contribution, indemnity and/or any other available remedy against any person found to be responsible or liable for contribution, indemnity or otherwise for any amounts which have been or will be expended by the Respondent in connection with the site.

XVIII. INDEMNIFICATION

59. The Respondent agrees to indemnify and hold the United States Government, its agencies, departments, agents, and employees harmless from any and all claims or causes of action arising from, or on account of, acts or omissions of Respondent, its employees, agents, servants, receivers, successors, or assignees, or any persons including, but not limited to, firms, corporations, subsidiaries and contractors, in carrying out activities under this ORDER. Provided, however, that the foregoing indemnity shall not be applicable to matters arising from negligent or willful acts or omissions of the United States or its officers, employees, agents, contractors, subcontractors, or any other person acting on its behalf. The United States Government or any agency or authorized representative thereof shall not be held as a party to any contract entered into by Respondent in carrying out activities under this ORDER.

XIX. FORCE MAJEURE

60. A Force Majeure condition for the purposes of this ORDER is defined as any event arising due to circumstances beyond the control of the Respondent or any entity controlled by Respondent, including its contractors and subcontractors, which could not have been prevented or mitigated by the exercise of due diligence and that delays or prevents the performance of any obligation under the ORDER. Such events shall include, but not be limited to, Acts of God, and delays resulting from stoppage or modification of the Work due to damages to persons or property unanticipated and unattributable to Respondent. To the extent that completion of the activities specified herein is unavoidably delayed by a Force Majeure event, the time for performance shall be extended for the period of time which can be reasonably attributed to such circumstances. Delays that result from causes beyond the Respondent's control, i.e., the causes of the delay have been determined pursuant to this ORDER to constitute a Force Majeure condition, shall not be a violation of its obligations under this ORDER. Examples of events that are not Force Majeure include, but are not limited to, increased costs or expenses of any work to be performed under the ORDER or the financial difficulty of Respondent to perform such work.
61. The Respondent shall notify EPA in writing of any delay caused by circumstances beyond their control within three (3) days after the occurrence of an event causing in whole or in part such failure. The notice shall describe the reason for and anticipated duration of any delay and the actions which were or will be taken to mitigate or minimize the delay. Should Respondent become aware of circumstances which may constitute

a Force Majeure event prior to its occurrence, Respondent shall also notify EPA within three (3) days. Failure to notify EPA promptly and consistent with the provisions of this paragraph shall be considered a waiver of force majeure and grounds for denying an extension. The Respondent has the burden of proving this delay is due to circumstances beyond its control and that the delay was not preventable by the exercise of due diligence and due care, and it must also prove the length of the delay resulting from such circumstances.

XX. STIPULATED PENALTIES

62. Failure to comply with any term or condition of this ORDER is a violation of this ORDER and is subject to stipulated penalties. In the event of any violation of this ORDER, including any delay in performance of this ORDER which is not in EPA's judgment properly justified, and also including any failure to complete a deliverable in a timely manner or to produce a deliverable of acceptable quality, upon written demand by EPA the Respondent shall pay into the HAZARDOUS SUBSTANCES SUPERFUND the sum set forth in the below paragraphs of this stipulated penalties section. The due date for payment for any such sums is the date that the demand for payment is sent to Respondent.

A. The payment shall be made by mailing a money order, cashier's check, or certified check payable to the HAZARDOUS SUBSTANCES SUPERFUND within thirty (30) days of the due date to the following address:

Regional Hearing Clerk (6C)
U.S. EPA, Region 6
P.O. Box 360582M
Pittsburgh, PA 15251

B. Docket No. CERCLA 6-05-91 should be clearly typed on the check to ensure credit.

C. Respondent shall send simultaneous notices of such payments, including copies of the money order, cashier's check or certified check to the following:

Mr. John R. Burleson
United States Environmental Protection Agency
Region 6 Superfund Enforcement Branch (6H-EC)
1445 Ross Avenue
Dallas, Texas 75202-2733

Ms. Kristine A. M. Leopold
U.S. Environmental Protection Agency
Region 6 Office of Regional Counsel (6C-WT)
1445 Ross Avenue
Dallas, Texas 75202-2733

Respondent's adherence to these procedures will ensure proper credit when payments are received.

63. If EPA does not receive payment within thirty (30) days of the due date, interest will accrue on the amount due from the due date at the current annual rate prescribed and published by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletin per annum through the date of payment.
64. For any violation of this ORDER, stipulated penalties shall accrue from the date of violation until the violation is corrected in the amount of \$1500 per day, per violation for the first week of noncompliance; \$3000 per day, per violation, for the 8th through 14th day of noncompliance; and \$7500 per day, per violation for the 15th day and beyond of noncompliance.
65. The stipulated penalties for violations of this ORDER, as set forth above, shall be in addition to any other remedies or sanctions which may be available to EPA by reason of the Respondent's failure to comply with the requirements of this ORDER.

XXI. PENALTIES FOR NONCOMPLIANCE

66. Failure to comply with this ORDER, or any portion thereof, without sufficient cause, may subject Respondent, under § 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), to liability for punitive damages in an amount up to three times the costs incurred by the government as a result of the Respondent's failure to take proper action.

XXII. SUBSEQUENT AMENDMENT

67. In addition to the procedures set forth in this ORDER, this ORDER may be amended by mutual agreement of the EPA and the Respondent. Any amendment of this ORDER shall be in writing, signed by the EPA and the Respondent and shall be effective on the date that Respondent receives notice that such amendment has been signed by the EPA.

XXIII. TERMINATION

68. This ORDER shall terminate when all actions required to be taken by this ORDER have been completed, and Respondent has been notified by the EPA in writing that this ORDER has been satisfactorily complied with and terminated. This notice shall not, however, terminate Respondent's obligation to comply with Sections XVIII of this ORDER.

Dated, entered, and effective as of this 31st day of October, 1991, with the agreement and consent of all parties.

THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Myron O. Knudson
Myron O. Knudson, P.E.
Director
Hazardous Waste Management Division (6H)
United States Environmental Protection Agency

AGREED TO:

By: [Signature]
Homer J. Kirby, President
Murmur Corporation
and Murmur Leasing Corp.

OCT 31 1991

Date



REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202-2733

MEMORANDUM

DATE: October 24, 1991

SUBJECT: ACTION MEMORANDUM
Request for Removal Action at the West Dallas (RSR)
Lead Site
Dallas, Dallas County, Texas
Cerclis# TXD079348397
Site ID: 2H
Category of Removal: Emergency

FROM: Warren Zehner
Senior On-Scene Coordinator
Removal (6E-ES)

TO: Robert E. Layton Jr., P.E.
Regional Administrator (6A)

THRU: Russell F. Rhoades
Director
Environmental Services Division (6E)

I. PURPOSE

This memorandum requests approval for a Removal Action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended, 42 U.S.C. §9601 et seq. at the West Dallas (RSR) Lead Site. The proposed action involves the control of unauthorized or inadvertent access to residential areas that are either condemned or vacant which were contaminated with the uncontrolled lead and related heavy metals smoke stack emissions originating from the RSR Corp. (Murph Metals). In addition to access control, soil in the actively utilized areas of the site contaminated by the uncontrolled smoke stack emissions or improper disposal of waste materials originating from the smelting operation will be consolidated for storage in a secure facility pending evaluation of ultimate disposal options.

This action meets the criteria for initiating a removal action under section 300.415 of the National Contingency Plan (NCP) and is anticipated to require less than twelve months and less than \$2 million for completion.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Removal Site Evaluation

In July 1991, the United States Environmental Protection Agency (EPA) was notified by the Texas Water Commission (TWC) that hazardous waste and/or materials had been found in the west Dallas area. The TWC discovered this material/waste after investigating a citizen's complaint. The materials discovered by the TWC were slag and battery chips allegedly originating from the RSR Corp. smelting facility and were either disposed of improperly or used as a "fill" material. Analytical results on this material indicated lead levels at 64,000 ppm, arsenic levels in excess of 2000 ppm and cadmium levels above 100 ppm. After the initial discovery of the slag and battery chip material in non-residential areas, several additional citizen's complaints regarding similar contamination on residential properties were received by the TWC. Analytical results from these areas were similar in concentration to the non-residential areas.

While the site has not been ranked for possible addition to the National Priorities List (NPL), a preliminary assessment (PA) is currently being conducted for the site.

The key problems associated with this site is contaminated soil originating from the smoke stack emissions and the improper disposal or use of waste material from the smelting process. The extent of the contamination is pending the completion of the extent of contamination survey currently being conducted by the Emergency Response Branch (ERB) of the EPA.

2. Physical Location

The site consists of several blocks of the general west Dallas area. In general, the site boundaries are as follows; north and east boundaries are the Trinity River, Fort Worth Ave. is the southern boundary and Loop 12 (Walton Walker) is the western boundary.

Within the boundaries of the site the predominant land use is residential, both single and multi-family units. There is a moderate amount of light industry and little to no heavy industry. As the predominate land use of the area is residential, several schools, churches, parks, recreational facilities, day

care centers, shopping areas and other related service oriented businesses are located within the site boundaries. Population within the area numbers several thousand, with the demographics of the population being predominantly low income, ethnic minorities.

3. Site Characteristics

As stated above the site is predominately a residential area with the associated service oriented facilities (schools, parks, etc.) and service oriented businesses. The residential areas within the site are both single family and multi-family units. All of the single family units are held by private individuals or companies (investors). The multi-family units are located within the Lakewest Public Housing Project and are owned and operated by the Dallas Housing Authority (DHA) and the City of Dallas. As aforementioned, the contamination of this area originated from the uncontrolled smoke stack emissions or the improper disposal of waste materials (using slag/battery chips for "fill" or paving material) from the secondary smelting process at the RSR Corp. facility within the boundaries of the site. At this time, this facility (the RSR/Murph Metals Lead Smelter) appears to be the only significant contributing source to the contamination of the site. This facility changed ownership in the early 1980s and has not operated since Murmur Corp./Murmur Leasing Corp. purchased the site. The current owners do not plan to resume active smelting of lead on the premises of the facility.

4. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant

The site is predominantly a residential area with several highly frequented recreational and high public use areas (schools, churches, etc.). These contaminated areas are generally not secure and are readily accessible to the public. Natural vegetative barriers (grass or ground cover) are highly variable within the area making the contaminated material susceptible to rain and wind blown contaminated particles to be spread. Further, vehicular and foot traffic also potentially spreads the contamination to additional areas within the site boundaries or off-site areas.

The principal contaminants of concern include arsenic, cadmium and lead from the battery recycling process which are listed as hazardous substances as defined by section 101(14) of CERCLA, 42 U.S.C. §9601(14) and 40 C.F.R. Section 302.4. The EPA, TWC, Texas Air Control Board (TACB), and the City of Dallas have collected current or historical samples from the multi-media exposure pathways on this site. The samples were analyzed for total lead, total cadmium, total arsenic, and TCLP lead. The most significant contamination has been associated with lead. Recent samples taken from the site show TCLP lead concentrations

above the established regulatory level (5 ppm). By exceeding the regulatory level of 5 ppm, the samples exhibit the characteristic of toxicity and are RCRA hazardous wastes, and meet the criteria for hazardous substances under Section 101(14) of CERCLA. Total analysis of the heavy metals of interest indicate that in the slag on site; arsenic ranged up to 2560 ppm, cadmium ranged up to 110 ppm and lead ranged up to 64,000 ppm. Analysis of the soil/battery chips from the site show similar concentrations of the heavy metals of interest. Heavy metal contamination of just soil in the area also exhibited elevated concentrations of the target elements. Soil analysis indicated arsenic concentrations up to 326 ppm, cadmium concentrations up to 14.8 ppm and lead concentrations up to 5790 ppm. While these concentrations are significantly lower than the concentrations exhibited by the slag and soil/battery chip mixture, they are extremely elevated for a predominately residential area.

5. NPL Status

This site is not presently on the National Priorities List (NPL). EPA Superfund Site Assessment is currently initiating the evaluation process for this site's potential inclusion to the NPL.

6. Maps, Pictures and other graphic representations

See Attachment 2.

B. Other Actions to Date

1. Previous Actions

The EPA, several State agencies and the City of Dallas have conducted several previous actions against the former owners of the smelting facility (RSR Corp.) located within the boundaries of the site.

The City of Dallas began a series of legal actions against the RSR Corp. in 1968, which included fines, lawsuits and compliance agreements, for air emission standards violations by the smelting facility on the site. In addition to the legal actions taken by the City, the City of Dallas Health Department began conducting a series of blood lead testing on the children within the current boundaries of the site in 1972. Blood lead testing was conducted again in 1981, again in 1982 in conjunction with the Center for Disease Control (CDC) and the City is currently conducting a voluntary, walk-in testing for the residents of the site area. Also, since approximately 1968, the City of Dallas has been monitoring the general air quality on the site, specifically around the smelting facility. It was these air monitoring

results that gave the City and the TACB the basis for a final lawsuit against the RSR Corp. smelter for emission violations. This lawsuit was filed in May 1983 and later settled out of court in October 1983. As part of the settlement, on October 17, 1983 the 95th State Judicial District Court ordered the RSR Corp. to add pollution abatement equipment to their smoke stack and further ordered that the corporation fund a clean-up of the residential areas immediately around the smelter, which, in general, exceeded the 1000 ppm acceptable exposure level for lead. In addition to the clean-up, several exposure reduction measures (sodding bare ground, washing building exteriors, etc.) were ordered by the court as part of the settlement. The clean-up and exposure reduction activities were over seen by a Court appointed Special Master. The Court ordered activities were completed in 1985.

Involvement by the regulatory agencies of the State of Texas was led by the TACB. The TACB's involvement on the site centered on lead emission issues (air quality samples, regulatory compliance, etc.). In 1981 the TACB conducted hearings on lead emissions and the status of the State Implementation Plan (SIP) for lead. As stated above the TACB was also a co-plaintiff with the City of Dallas in the 1983 lawsuit against RSR Corp. After the Court settlement, the Texas Department of Water Resources (now TWC) became involved in the monitoring of the clean-up.

Federal agencies involved on this site, included both the EPA and CDC. The CDC was heavily involved with the 1982-83 Dallas Area Lead Assessment Study, which was conducted jointly with the EPA and the City of Dallas. EPA began working on this site in 1980-81 by funding Argento and Crosby (University of Texas at Arlington professors). EPA participated in the aforementioned 1982-83 study and in 1983 issued an Administrative Order on Consent to RSR Corp. that reflected the stipulations of the 1983 Court ordered settlement.

2. Current Actions

As aforementioned, EPA ERB was made aware of additional contamination on this site in July 1991, by the TWC. Current actions on this site reflect a cooperative agreement between the EPA ERB, the TWC and the City of Dallas. Under the general scope of this cooperative agreement, the ERB is conducting an extent of contamination survey within the general boundaries of the historic deposition of the smoke stack emissions. In addition to the extent of contamination survey, the ERB is also conducting random sampling of the clean-up (excavation) area addressed in the 1983-1985 to address citizen concerns over the effectiveness of that clean-up effort.

In addition to the activities being conducted by the ERB, Superfund Site Assessment is currently conducting a review of the existing site data and to conduct a joint NPL evaluation with the TWC.

The TWC had agreed to address all slag and battery chip areas that are outside of the EPA extent of contamination survey. In August 1991, TWC initiated fencing actions at three slag disposal areas on site. The TWC will also be conducting a limited amount of removal actions (3) on residential properties that were found to be contaminated with battery chips as a result of their investigations. In October 1991, the TWC informed EPA that due to funding limitations, all additional residential sites that are found to be contaminated as a result of their investigations will be referred to the EPA for action.

The City of Dallas Health Department has been conducting voluntary blood lead testing and follow up in-home sampling, as needed, for the residents living within the boundaries of the site. To date, a total of 1405 people have been tested for blood lead, with 65 individuals having blood lead values above the CDC standard of 10 ug/dl. Further, within the target population of children ages 0 - 6 years of age, 174 (part of 1405) have been tested and 20 (part of 65) had values above the CDC standard. The results of the 17 in-home sampling for lead have indicated no severe or widespread in home problem, with only two elevated readings.

C. State and Local Authorities Role

As aforementioned and thoroughly described above, the TWC will continue its' site assessment sampling and remedial data gathering in conjunction with the EPA. The City of Dallas will continue its' voluntary residential health monitoring activities. Also, the EPA ERB will continue to coordinate with the Dallas Independent School District and the Dallas Housing Authority regarding any contribution or assistance they may provide regarding their contaminated properties.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT

A. Threats to Public Health and Welfare

The predominant threat to the public health and welfare on this site emanates from the inhalation and/or ingestion of lead and/or arsenic contaminated particulates. As noted in the site description, this site is predominately residential. To date several areas both within the residential areas and at those facilities such as parks and churches have been found to be contaminated with lead levels above those established as an

acceptable public health risk (500 ppm) for this type of setting. The full extent and magnitude of the lead and/or arsenic contamination on this site has yet to be determined.

Lead is a highly toxic metal, producing a range of adverse human health and environmental effects, particularly in children and fetuses. These adverse effects include reproductive system disorders, delays in neurological and physical development, cognitive and behavioral changes, and increased blood pressure.

The main exposure pathway for lead and lead compounds is through inhalation. Fine particles of lead and/or lead compounds are easily absorbed through the alveoli, tiny air sacs in the lungs, and passed readily to the blood for transportation throughout the body. Further, alveolar absorption is more efficient in juveniles than in adults. Although, recent data from the City does not indicate that there are any major lead emission currently occurring on site, historical data indicates the presence of airborne lead particulates on the site and the potential for localized windblown suspension of lead contaminated soil particulates cannot be ignored as 65 residents of the site have had elevated blood lead results.

The second major route of exposure to lead and/or lead compounds and other heavy metals is through ingestion. This route appears to have the most significance with juveniles, as noted in several studies on ingestion of lead based paint. In adults, most of the lead that is ingested is passed out through the digestive tract or as part of bile (liver) or urine.

Arsenic is a silver-gray or tin-white metal. Small amounts of arsenic are found in lead ores and arsenic is also commonly used in the alloying of lead for specific uses (eg. shot gun pellets). Human exposure to arsenic occurs through dermal absorption, inhalation and ingestion. The permissible exposure level (PEL) for arsenic dust is 10 ug/m³ in the work place. The airborne concentration which is Immediately Dangerous to Life and Health (IDLH) is 100 mg/m³, however, it should be noted that arsenic is a suspected human carcinogen and IDLH levels may not be totally protective. Acute toxicity can occur through any of the exposure pathways. Effects such as irritation to upper respiratory tract, perforation of the nasal septum, skin irritation and severe fluid loss are all symptoms of acute arsenic poisoning. Arsenic is persistent and absorbed into the body causing long term effects, such as liver damage, lung and skin cancers.

B. Threats to the Environment

The environmental media affected by this site are: air, through wind-blown dust; soil from the localized run-off.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substance from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

The proposed action involves the control of unauthorized or inadvertent access to residential areas that are either condemned or vacant which were contaminated with the uncontrolled lead and related heavy metals smoke stack emissions originating from the RSR Corp. (Murph Metals). In addition to access control, soil in the actively utilized areas of the site contaminated by the uncontrolled smoke stack emissions or improper disposal of waste materials originating from the smelting operation will be consolidated for storage in a secure facility pending evaluation of remediation options and the ultimate disposition of the stored materials.

1. Proposed Action Description

Securing of the condemned or vacant contaminated residential areas of the site will consist of fencing part of the Lakewest Public Housing Project (George Loving) and the placement of warning signs. This action will prevent both unauthorized and inadvertent access to this area of the site.

The remainder of the soil contaminated with smoke stack emissions and/or with battery chips will be consolidated within the area of contamination away from the residential and highly frequented public access areas (schools, churches, parks, etc.) and will be stored at Tract #1 of the Murmur property. Removal of the contaminated material is consistent and in compliance with the guidelines established in OSWER Directive #9355.4-02, as amended August 29, 1991. At the secure storage area on Tract #1, soil/debris meeting the hazardous waste criteria (TCLP > 5 ppm) will be bagged and stored for ultimate disposition of those materials through the Superfund Program. Contaminated material that does not meet the hazardous waste criteria will be evaluated for permanent disposal. Criteria that will be used to evaluate permanent site disposal options are: final volume, cost, and available remaining storage capacity in the secure storage area.

2. Contribution to remedial performance

These actions are cost effective, consistent with any long term remediation strategies that may be developed for the site since proposed actions will not impact future disposal or treatment

options. Further, all of the actions to be taken during this removal are compliant with all applicable ARARs to the extent practicable, and provide an effective mitigation of the imminent and substantial threats posed to the general public health and environment by the site.

3. Description of Alternative Technologies

Due to the emergency nature and sensitivity of this site, any alternative technologies to those described above are impractical and were not considered. The review and implementation of alternative technologies on this site based on the aforementioned sensitivity are best done by the Superfund Remedial Program.

4. Applicable or relevant and appropriate requirements (ARARS)

This removal action will be conducted to eliminate the threat or potential threat of a hazardous substance, pollutant or contaminant pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Superfund Amendments and Reauthorization Act (SARA) {42 U.S.C. Sections 9601-9675}, and in a manner consistent with the National Contingency Plan {40 CFR Part 300} as required in {33 U.S.C. Section 1321(c)(2)} and {42 U.S.C. 9605}.

Any hazardous substance, pollutant, or contaminant that will remain on-site must achieve any standard, requirement, criteria, or limitation under any Federal environmental law, including, but not limited to, the Safe Drinking Water Act (SDWA) {42 U.S.C. 300f et. seq.}, the Clean Air Act (CAA) 42 U.S.C. 7401 et. seq.}, the Clean Water Act (CWA) {33 U.S.C. 1251 et. seq.}, the Solid Waste Disposal Act {42 U.S.C. 6901 et. seq.}, or any promulgated standard, requirement, criteria, or limitation under a State environmental or facility siting law that is more stringent than any federal standard, requirement, criteria, or limitation contained in a program approved, authorized or delegated by the Administrator and identified to the President by the State. At the completion, a level or standard of control for such hazardous substances or pollutants or contaminants which at least attains such legally applicable or relevant and appropriate standard, requirement, criteria or limitation shall be achieved. Action shall require a level or standard of control which at least attains Maximum Contaminant Levels (MCLs) established under the SDWA and water quality criteria established under section 303 or 304 of the CWA, or where such goals or criteria are relevant and appropriate under the circumstances of the release or threatened release.

The ability and qualifications of all parties conducting the proposed Removal Action will be demonstrated. All parties involved will be experienced to conduct the Removal Action properly and promptly as required by CERCLA.

Transportation off-site of hazardous substance, pollutants, or contaminants will be in accordance with the applicable Department of Transportation regulations, and any additional applicable or relevant and appropriate Local, or State, and/or Federal Regulations.

Disposal of hazardous substances, pollutants, or contaminants will be in accordance with the Resource Conservation and Recovery Act (RCRA) of 1976, {42 U.S.C. 6921 et. seq.}, the regulations promulgated under that act, and EPA's Off-site Disposal Policy, Section 121(d)(3) of CERCLA, 42 U.S.C. 9621(d)(3) as implemented by OSWER Directive 9834.11 (November 13, 1987). Such hazardous substances, pollutants, or contaminants shall only be transferred to a facility which is operating in compliance with section 3004 and 3005 of the Solid Waste Disposal Act {42 U.S.C. 6924 and 6925} (or, where applicable, in compliance with other Federal law) and all applicable State requirements.

Requirements under the Occupational Safety and Health Act (OSHA) of 1970 {29 U.S.C. 651 et. seq.} and under the laws of States with plans approved under section 18 of the States OSHA laws, as well as other applicable safety and health requirements will be followed. Federal OSHA requirements include among other things, Hazardous Materials Operation {20 CFR Part 1910, and amended by 54 Fed. Reg. 9317} (March 5, 1989), all OSHA General Industry {29 CFR Part 1910}, and Construction {29 CFR Part 1926} standards wherever they are relevant, as well as OSHA recordkeeping and reporting regulations, and the EPA regulations set forth in 40 CFR Section 300, relating to the conduct of work at Superfund Sites.

5. Project Schedule

The emergency removal action to secure the site, provide source control, and removal of off-site contamination is scheduled to begin on November 1, 1991.

B. Estimated Costs

Extramural Costs:

Regional Allowance Costs:

ERCS Cleanup Contractor.....\$1,200,000

Other Extramural Costs Not Funded From the Regional Allowance:

TAT Costs.....	\$ 300,000
ERT Contract (REAC).....	\$ 40,000
Subtotal, Extramural Costs.....	\$1,540,000
Extramural Costs Contingency (20%).....	\$ 308,000
TOTAL, EXTRAMURAL COSTS.....	\$1,848,000

Intramural Costs:

Intramural Direct Costs.....	\$ 34,000
Intramural Indirect Costs.....	\$ 67,000
TOTAL, INTRAMURAL COSTS.....	\$ 101,000
TOTAL, REMOVAL PROJECT CEILING.....	\$1,949,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Should no action be taken, this site would remain in its present state and would continue to pose a significant potential public health risk to the residents of the area through direct contact,, inhalation and/or ingestion of the lead/arsenic particulates.

VII. OUTSTANDING POLICY ISSUES

Not applicable

VII. ENFORCEMENT

See Attachment

IX. RECOMMENDATION

Because conditions at these sites meet the NCP Section 300.415 (b)(2) criteria for a removal, I recommend your approval of the proposed removal action. The estimated cost for this portion of the project is \$1,949,000 of which \$1,200,000 is for extramural clean up contractor costs. Please indicate your approval or disapproval by signing below.

APPROVED: _____

DATE: _____

10/31/91

DISAPPROVE: _____

DATE: _____

Texas Water Commission

INTEROFFICE MEMORANDUM

TO : Files DATE: 08/03/89
THRU : Ernest W. Heyer, Chief, Program Services Unit,
Field Operations Division
FROM : Tim Sewell, Environmental Quality Specialist,
District 4
SUBJECT: Murmur Corporation (Site I) - Dallas, Texas
SW Registration No. 34382; EPA I.D. No. TXD030169080
CEI Inspection; Conducted 06/30/89

On June 30, 1989 and July 13, 1989, the writer contacted Mr. Homer Kirby and Mr. Kenneth Sims, Manager, and conducted an industrial solid waste compliance inspection at the 2820 North Westmoreland facility in Dallas, Texas.

This facility, originally known as RSR Corporation, previously operated as an interim status secondary lead smelter. A Part A Permit Application was filed with EPA on November 19, 1980. According to Joan Allen, TWC Central Office, TWC received the facility's Part B Permit Application on January 30, 1985. This Part B Permit Application was declared administratively complete on February 15, 1986.

It should be noted that:

- A. On August 4, 1983, Site I (not registered), the smelter site, and Site III (registered), the battery breaking waste handling site, were submitted to TWC Central Office for enforcement action;
- B. Site I is not addressed in the September 30, 1987 Commission Order. The Commission Order required the closure of Site III due to loss of interim status and lack of valid permit; and
- C. District files do not indicate that Site I's Part B Permit Application has been withdrawn.

In addition, no other records regarding this site were available for on-site review since the site had not operated as a secondary lead smelter in several years. The site is abandoned.

The facility is currently inactive and previously operated as a secondary lead smelter. According to District files, the facility has not operated since prior to an August 7, 1984 industrial solid waste compliance inspection conducted by

Christopher Swan of this office. Although no waste is currently generated at this facility, a variety of waste remains stored at the facility. Waste stored includes smelter baghouse dust, spent diatomaceous earth, lead oxide dust, spent refractory brick, waste oil, spent absorbant, grease, kerosene, filter bags (in plastic bags), empty drums, contaminated rainwater and miscellaneous scrap materials. Waste management units listed on the facility's NOR include a container storage area (No. 1, exact location unidentified) for spent diatomaceous earth, iron oxide slag, miscellaneous plant waste, spent refractory brick, and baghouse dust; a container storage area (No. 2, roll-off boxes, no longer present) for wood scrap and plant trash; and a container storage (No. 3, tractor trailer, no longer present) for scrap iron, lead-contaminated containers and oil-contaminated containers. In addition, the facility has several waste management facilities not listed on the NOR. These facilities include the following units:

1. Three waste piles containing refractory brick located in the southwest corner of the smelter building;
2. One waste pile containing filter bags located adjacent to the old outdoor oil storage area;
3. One baghouse dust container collection area (currently functioning as a waste management unit) located east of the baghouse building;
4. Three container storage areas located:
 - a. in the southwest section of the smelter building,
 - b. in the "hog" storage building, and
 - c. adjacent to the outdoor oil storage area; and
5. Five waste piles containing a gray solid (possibly diatomaceous earth) located:
 - a. in the southwest corner of the smelter building;
 - b. in a material storage area (three-sided concrete bins) (No. 15) adjacent to north door, center of smelter building);
 - c. in a loading area east of concrete bin area adjacent to north door;

- d. in the material storage building (bin No. 13); and
 - e. in the material storage building (bin No. 9); and
6. Miscellaneous dust piles (possibly lead oxide) throughout the smelter and material storage buildings.

During this inspection, samples were collected (split with owner/operator, see attachments) from the corroded baghouse dust collection drum located beneath the northernmost collection conduit (SW06627), a dust pile (possibly containing lead oxide) adjacent to bin No. 9 (SW06628), and a waste pile containing diatomaceous earth (SW06629) stored in bin No. 9. Requested sample analyses for all samples included total lead, total cadmium, total arsenic, EP toxicity lead, EP toxicity cadmium, and EP toxicity arsenic. Since these wastes have not been reclaimed (K069 baghouse dust remains a waste even when reclaimed) or beneficially reused, it is the writer's opinion that the stored lead oxide dust and the diatomaceous earth are also hazardous waste (both are EP toxic for lead and cadmium) until such time as they are recycled. It should be noted that both of these waste streams are currently listed on the facility's NOR as being Class I nonhazardous.

Surrounding land use includes industrial and commercial activities. It should be noted that the adjacent low income housing project is unoccupied and awaiting demolition.

Chronology of Events (3-year compliance history):

June 27, 1986 - An industrial solid waste compliance inspection was conducted by Gerardo Garcia, Mike Delaney, and Sid Slocum of this office. No records were available for on-site review. Diatomaceous earth was noted as being stored on-site.

March 6, 1987 - An industrial solid waste compliance inspection was conducted by Michael Whelan of this office. No records were available for on-site review. It was noted that the company had not updated the facility's NOR to include two waste piles containing diatomaceous earth as on-site waste management facilities.

Summary of Alleged Violations

1. TAC 335.62 - Waste Determination
Generators Checklist - Part A.1.

It was noted that the facility had not completed the required waste determination for lead oxide dust, filter bags, waste oil, grease, scrap materials, kerosene, spent absorbant, and contaminated rainwater. In addition, the facility has not conducted an adequate waste determination for baghouse dust and diatomaceous earth. According to TWC sample results, these waste streams are EP toxic for lead and cadmium.

2. TAC 335.6(b) - Notification Requirements
Generators Checklist - Part A.4. and 5.

Solid Waste Registration No. 34382 should be updated with the following information:

- A. Diatomaceous earth (Waste No. 003) should be listed as hazardous waste, not Class I waste;
- B. Baghouse dust (Waste No. 010) should be listed as hazardous waste, not Class I waste;
- C. Lead oxide dust, filter bags, waste oil, grease, scrap materials, kerosene, spent absorbant, and contaminated rainwater should be listed as waste generated;
- D. Five waste piles appearing to contain diatomaceous earth should be listed as waste management units;
- E. Three container storage areas containing diatomaceous earth, used oil, grease, scrap materials, kerosene, contaminated rainwater, and spent absorbant should be listed as waste management units;
- F. One waste pile containing filter bags should be listed as a waste management unit;
- G. One container storage (dust collection) area containing baghouse dust should be listed as a waste management unit; and

- H. Three waste piles containing spent refractory brick should be listed as waste management units.

3. TAC 335.4 - General Prohibitions
Generators Checklist - Section B.1. and (a).

It was noted that:

- A. Six corroded drums (see photos) containing baghouse dust were stored east of the baghouse in an outdoor dust collection area; and
- B. Numerous drums containing contaminated rainwater were stored adjacent to the outdoor oil storage area (no canopy or covering) in poor condition or without bungs (see photos).

4. TAC 335.71(a) and (b) - Recordkeeping
Generators Checklist - Section D.1.(g)

It was noted that the facility does not maintain on-site records containing analytical results of hazardous waste determinations.

5. TAC 335.112(a)(1) - Standards; 40 CFR Part 265.16 -
Personnel Training
General Facilities Checklist - Section B

It was noted that this facility does not maintain a personnel training program and records as required.

6. TAC 335.112(a)(2) - Standards; 40 CFR Part 265.30-.37 --
Preparedness and Prevention
General Facilities Checklist - Section C

It was noted that this facility does not adequately address preparedness and prevention requirements.

7. TAC 335.112(a)(3) - Standards; 40 CFR Part 265.50-.56 --
Contingency and Emergency Procedures
General Facilities Checklist - Section D2

It was noted that this facility does not address contingency and emergency procedures as required.

8. TAC 335.112(a)(1) - Standards; 40 CFR Part 265.13 - General Waste Analysis
General Facilities Checklist - Section E

It was noted that this facility does not maintain a written waste analysis plan as required.

9. TAC 335.112(a)(1) - Standards; 40 CFR Part 265.14 - Security
General Facilities Checklist - Section F

It was noted that this facility:

- A. has not adequately repaired or replaced missing southern boundary fence boards - hole in fence - (see photo);
- B. has not secured broken windows in the facility's western main gate guardhouse (see photo); and
- C. has not posted the required warning signs on all approaches to the facility.

10. TAC 335.112(a)(1) - Standards; 40 CFR Part 265.15 - General Inspection Requirements
General Facilities Checklist - Section G

It was noted that this facility does not maintain written inspection schedules and logs as required.

11. TAC 335.112(a)(4) - Standards; 40 CFR Part 265.73 - Operating Record
General Facilities Checklist - Section J

It was noted that this facility does not maintain an operating record as required.

12. TAC 335.112(a)(7) - Standards; 40 CFR Part 265 Subpart E
- Financial Requirements
General Facilities Checklist - Section K

It was noted that this facility does not maintain the required:

- A. closure cost estimate;
- B. post-closure cost estimate;
- C. sudden liability assurance;
- D. non-sudden liability assurance;
- E. closure cost assurance; and
- F. post-closure cost assurance.

13. TAC 335.112(a)(8) - Standards; 40 CFR Part 265.171 -
Condition of Containers
Container Checklist - No. 1 and No. 3

It was noted that six drums utilized to collect and store baghouse dust were corroded and in poor condition (see photos). In addition, several drums appearing to contain residual diatomaceous earth were stored inside of the smelter building without tops and in poor condition.

14. TAC 335.112(a)(6) - Standards; 40 CFR Part 265.112 -
Closure Plan
Closure and Post-Closure Checklist - Section A.2.

It was noted that the facility does not maintain the required written closure plan.

15. TAC 335.112(a)(6) - Standards; 40 CFR Part 265.112 -
Post-Closure Plan
Closure and Post-Closure Checklist - Section B.2.

Murmur Corporation (Site I) - Dallas, Texas
SW Registration No. 34382
Page 8
August 3, 1989

It was noted that the facility does not maintain the required written post-closure plan.

Other Areas of Concern

During this inspection, it was noted that facility's owner/operator had experienced numerous and continual site security deficiencies due to constant breaking and entering incidents by private citizens. According to Mr. Kirby, vagrants and others have repeatedly damaged his boundary fence or other barriers in order to gain unauthorized access to the facility. It was alleged that these individuals then either steal scrap metals and other materials or utilize the buildings as shelter. Lack of regular facility maintenance and accumulated damage to equipment and structures indicate that it is unlikely that this facility may resume smelting operations without both extensive repairs and the issuance of a Special Use Permit by the City of Dallas. Unless both of these conditions can be addressed in a timely manner, this facility may continue to present a potential threat to human health and the surrounding environment.

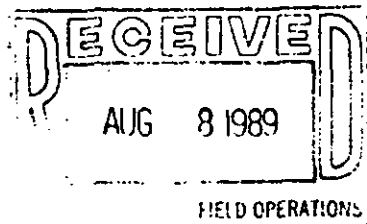
It is requested that these concerns be addressed concurrently with regard to the aforementioned alleged violations.

Tim Sewell
Tim Sewell

Don C. [Signature]
Approved

TS:jc /

Attachments



TEXAS WATER COMMISSION

TWC 0849 (Rev. 05-23-86)

NO. SW

06627

District

24

Org. No.

324

Work No.

532A

Lab

TR

Site Name

Murn v. Corporation

Point of Collection

Baghouse dust

Site Location

2825 N. Westmoreland

northernmost drum

Dallas, Texas

County

Dallas

Basin

Trinity

Method of Collection

Clean plastic Scoops

Type facility: ☒ Drum; ☐ Tank; ☐ Impoundment; ☐ Landfill☐ Waste pile; ☐ Landfarm; ☐ Other

Time Collected

2:35 (am/pm)

Date Shipped

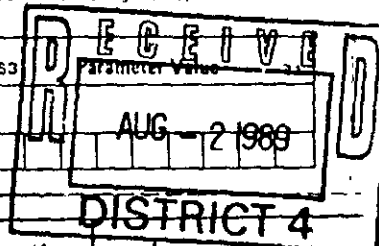
7-3-89

Add. COC #s

ODOR: ☒ Yes; ☐ No; Describe

S.W. Registration			Permit Number			Page No.			Date		
1	2	3	4	5	6	7	8	9	10	11	12
3	4	5	6	7	8	9	10	11	12	13	14
30	Code	35	Parameter Value	44	Code	49	Parameter Value	58	Code	63	Parameter Value

Tim Sewell
(Collector's Signature)



TEXAS WATER COMMISSION

TWC-0849 (Rev. 05-23-86)

NO. SW

06627

District

24

Org. No.

324

Work No.

532A

Lab

TRA

Material Sampled: ☒ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☐ Well (M);☐ Stream (S); ☐ Other (O)

AUG 1 1989

Comments

Lab Only	Date	rec'd:	894010-02
		7-3-89	
		7-24-89	
Analyst sign:		UMB	

Preservation: ☐ None; ☒ Ice; ☐ H₂SO₄; ☐ HNO₃

Other

Auxiliary Tags

LEACHATE: ☒ EP Toxicity Series; ☐ TWC

30	Code	35	Parameter Value	44	Code	49	Parameter Value	58	Code	63	Parameter Value	71
Total Cadmium mg/kg												
0	0	4	0	3			2760					
Total Arsenic mg/kg												
0	0	3	4	0			9096					
EPTOX Lead ug/L												
0	0	8	8	0			760000					
EPTOX Cadmium ug/L												
							14750					
Total Lead mg/kg												
							92000					
EPTOX Arsenic ug/L												
							58					

TWC 0849 (Rev 05 23 80)

NO. SW 06628

District 29

Org. No. 529

Work No. 2592 Lab. 1111

Site Name

Site Location

County

Method of Collection

Basin

12

Type facility: ☐ Drum, ☐ Tank; ☐ Impoundment; ☐ Landfill
☐ Waste pile; ☐ Landfarm; ☒ Other _____

Time Collected 2:50 (am ☒ pm ☐) Date Shipped 7-3-89

Add. COC 775

ODOR: ☐ Yes; ☒ No; Describe:

S.W. Registration						Permit Number						Page No.		Date		<i>Kim Sewell</i> (Collector's Signature)
1		9	10		18	19	21	22	23	24	25	26	27	28	29	
3	4	3	8	2												
30	Code	35	Parameter Value	44	Code	49	Parameter Value	58	Code	63	Parameter Value					

DECEIVE

AUG - 2 1989

DISTRICT 4

TEXAS WATER COMMISSION TWC-0849 (Rev.05-23-86)

TEXAS WATER COMMISSION

TWC-0849 (Rev.05-23-88)

NO. SW 06628

District

Org. No.

324

Work No.

532A

Lab _____

UKA

Material Sampled: ☒ Solid waste (W); ☐ Liquid waste (L); ☐ Soil (E); ☐ Well (M);

☐ Stream (S); ☐ Other (O)

Comments: in air contains lead oxide

~~ALL - 1089~~

(continued on back)

Lab Only	Date	rec'd: 7-3-89	DISTRICT 4 89-4011-02 (Lab No)
		cmplt: 7-24-89	
Analyst sign.: <i>Wm. B. [Signature]</i>			

Preservation: ☐ None; ☒ Ice; ☐ H₂SO₄; ☐ HNO₃,
Other _____

Auxiliary Tags _____

LEACHATE: ☒ EP Toxicity Series; ☐ TWC

30	Code	35	Parameter Value	44	Code	49	Parameter Value	58	Code	63	Parameter Value	71
							Total Cadmium mg/kg					
0	0	4	0	3			2080					
							Total Arsenic mg/kg					
0	0	3	4	0			5304					
							EP Tox Lead ug/l					
0	0	6	8	0			635000					
							EP Tox Cadmium ug/l					
							29000					
							Total Lead mg/kg					
							117000					
							EP Tox Arsenic ug/l					
							214					

30	Code	35	Parameter Value	44	Code	49	Parameter Value	58	Code	63	Parameter Value	71
							Total Cadmium	mg/kg				
0	0	4	0	3			133					
							Total Arsenic	mg/kg				
0	0	3	4	0			477.5					
							EPTOX Lead	ug/l				
0	0	6	8	0			13950					
							EPTOX Cadmium	ug/l				
							2400					
							Total Lead	mg/kg				
							49800					
							EPTOX Arsenic	ug/l				
							139					

BLVD.

WESTMORELAND '... ROAD

WESTERFIELD STREET

T. & P. R. R.

STATE OF TEXAS
COUNTY OF DALLAS[illegible]

REFERENCES

WITNESSES to the above of said Affidavit in the name of said Bureau are: JAMES H. HARRIS, Chief of the Bureau, and JAMES H. HARRIS, Chief of the Bureau, and JAMES H. HARRIS, Chief of the Bureau.

SECTION OF THE BOUNDARY AT THE EAST END OF MOUNTAIN ROAD
IN THE TOWN OF H. WITH THE NORTH LINE OF SECTION, SHOWN IN THE 1907
D.M.C. ON A TRIANGULAR FORM.

[illegible]

Further, specifically with the gold tooth ring of Benjamin Spilman, which
 found with gold rings to the left on the occasion of 250 J1 Sept 20 19
 Improvement with the top line of material sold before, on first grade found for
 model.

THREAT: Launch of 000 01 010 0000 with the 0010 0000 1000 of 000000000000
 Threat: a distance of 000 0 000 00 1000 0000 for 000000
 THREAT: 0000 00 000 10 000 0000 a distance of 100 01 0000 on 1000



WILSON: I don't know if you don't want to see the back of a group of hand
operated in Dallas (Texas) and (Lyle) Combs, some time with a group of
discovery in 1911 in the same area as the back of the same and possible

William & ISE FIVE & A M. at 1000 Street for a group
 of 1000 people with the intention of holding a large and public
 demonstration against the war in the city of New York.

[illegible]

has to find its place in civilization and contribute its share to
the good of all.

in child

 **SURVEYING ASSOCIATES** 
1027 SOUTH BECKLEY AVE
DALLAS, TEXAS 75203 PHONE (214) 940-3374 